55. FEATURES CELLULAR LINK OF IMMUNE RESPONSE SCHOOL-AGE CHILDREN WITH LATE-ONSET ASTHMA, DEPENDING ON ACETYLATION POLYMORPHISM

U.I. Marusyk, G.O. Myslytska

Bukovina State Medical University, Chernivtsi, Ukraine

Introduction. Bronchial asthma is one of the most common diseases in the world. It is believed that the inefficiency of controlling asthma therapy, which is observed in almost half of patients due, in particular, the presence of different asthma-phenotypes.

Considering the literature data on the association of asthma with genetic polymorphisms N-atsetyltransferase - an enzyme that determines feature metabolism, we thought it appropriate to assess the features of the state of cellular immunity in children with asthma late start, with their acetylation phenotypes.

Our aim is to optimize late-onset asthma control, to evaluate some indicators of cellular parts of the immune system in children, considering acetylation phenotypes.

Materials and Methods. Examined 72 children, late-onset asthma (disease first manifested itself in the age of 6 years). Over the course of the disease children were divided into two clinical groups. The first group included 34 patients who were evaluated slow type of acetylation (mean percentage of acetylated sulfadimezin in urine was less than 75.0%). The second clinical group formed 38 students, which was marked fast type of acetylation (mean percentage of acetylated sulfadimezin in urine was more than 75.0%). All children were tested for T-lymphocytes, T-helper cells and T killer/suppressor and B-lymphocytes blood.

Discussion results. In 66.6% children "slow acetylation" observed reduction of CD-3 in peripheral blood of at least 34.0%, while in the second group these indicators occurred only in 42.1% of cases ($P\varphi > 0\ 05$). This slow type of acetylation in children with late-onset asthma was Associate with the decline of CD-3 in peripheral blood (less than 34.0%) relative to the group "fast acetylation" as follows: relative risk - 1.7 (95% CI 1,3-2,2) the odds ratio of 2.7 (95% CI 1,5-4,8).

Every second child (54,1%) for the slow type of acetylation phenotype of late-onset asthma reduced content recorded CD-8 (less than 18.0 g/l), while the comparison group - only 21,0% of patients ($P\varphi < 0.05$).

The presence of slow acetylation phenotype in patients with late-onset asthma Associate with a decrease in the aforementioned content CD-22 cells in peripheral blood following: relative risk - 1.6 (95% CI 0,6-4, 1) at odds ratio - 3.6 (95% CI 1,3-10,1).

Conclusion. Most patients with slow type of acetylation course of late-onset asthma Associated with a decrease in the CD-3, CD-4, CD-8 in peripheral blood and B-lymphocytes, which indirectly indicates the severity of chronic inflammatory allergic process in this persons.

Keywords: Bronchial asthma, acetylation polymorphism, pediatrics.